

2016 DOE Natural Phenomena Hazards (NPH) technical meeting

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Revisions to DOE NPH Standard and DOE NPH Handbook

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The Department of Energy (DOE) Natural Phenomena Hazards (NPH) Program is established through DOE Order (O) 420.1C, *Facility Safety*. Management of this program is assigned to DOE Office of Nuclear Safety (AU-30). The mission of this program is to develop and maintain requirements, standards and guidance for DOE facilities exposed to natural phenomena hazards (NPHs). Direction and guidance is given for seismic, extreme wind, tornado, precipitation, flood, volcanic (where applicable) and lightening hazards. The program's primary DOE requirement documents comprise DOE Standard (STD) 1020-2012, *Natural Phenomena Hazards Analysis and Design Criteria for DOE Facilities* and DOE Handbook (HBK) 1220-2016, *Natural Phenomena Hazards Analysis and Design Criteria for DOE Facilities* (Supplemental Guidance). The NPH Standard provides criteria and guidance for the analysis and design of facility structures, systems, and components (SSCs) that are necessary to implement the requirements of DOE O 420.1C, *Facility Safety*, and to ensure that the SSCs will be able to effectively perform their intended safety functions under the effects of NPHs. The NPH Handbook has been developed to provide technical basis for DOE's NPH requirements and recommends good practices to support implementation of DOE NPH Standard. During 2015-2016, the NPH Standard was revised to incorporate updated information and lessons learned from its use and implementation since promulgation of the 2012 version. The NPH Handbook was also updated to be consistent with the revised Standard. The presentation will discuss the proposed changes to the NPH Standard, issuance of the NPH Handbook and the impact on DOE NPH mitigation.